

Derwent Registry Numbers: 1788-U

DERWENT WPI (Dialog® File 351): (c)1999 Derwent Info Ltd. All rights reserved.

30. ☐ 1/19/30

007569179

WPI Acc No: 88-203111/198829

XRAM Acc No: C88-090902

XRPX Acc No: N88-154900

**Optical thin film having less cumulative effect - used for  
optical systems using high optical strength ultraviolet ray laser beams**

Patent Assignee: NIPPON KOGAKU KK (NIKR )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 63142301	A	19880614	JP 86289696	A	19861204		198829 B

Priority Applications (No Type Date): JP 86289696 A 19861204

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
JP 63142301	A		5			

Abstract (Basic): JP 63142301 A

A multilayer or single layer optical thin film accepts extreme ultraviolet laser beams having the following optical strength: (a) At least 1.5 J/cm<sup>2</sup> for a fluorite substrate supporting the film. (b) At least 0.8 J/cm<sup>2</sup> for a quartz substrate. The thin film is composed of a fluoride dielectric substance or an oxide dielectric substance for the fluorite substrate or the quartz substrate respectively.

USE/ADVANTAGE - The optical thin film is applied to an antireflection film, interference filter, or interference mirror. The film is used for an optical system employing high optical strength extreme ultraviolet ray laser beams. The film has less cumulative effect. A difference is observed between the max. laser beam value (causes damage to the film) when the number of pulses (pulse light) is low and that when the number of pulses is high. The max. laser beam value when the number of pulses is high tends to decrease. This tendency is called the cumulative effect.

0/6

Title Terms: OPTICAL; THIN; FILM; LESS; CUMULATIVE; EFFECT; OPTICAL; SYSTEM  
; HIGH; OPTICAL; STRENGTH; ULTRAVIOLET; RAY; LASER; BEAM

Derwent Class: L01; P81; V08

International Patent Class (Additional): G02B-001/10; G02B-005/28

File Segment: CPI; EPI; EngPI

Manual Codes (CPI/A-N): L01-L05; L02-G10; L03-G

Manual Codes (EPI/S-X): V08-A09

DERWENT WPI (Dialog® File 351): (c)1999 Derwent Info Ltd. All rights reserved.

Format

☒ Select All

Display Selected

Full

☒ Clear Selections

Print/Save Selected

Send Results

**Records 31 - 38 of 38**

© 1998 The Dialog Corporation plc